Iowa Department of Natural Resources Environmental Protection Commission

ITEM 10 DECISION

TOPIC

Contract with University of Northern Iowa for a Dry Run Creek Ecotoxicological Evaluation

The Department requests Commission approval of a contract in the amount of \$51,939 with the University of Northern Iowa for an assessment of potential ecotoxicological conditions in Dry Run Creek (Black Hawk County). The contract period is from May 1, 2006 – April 30, 2007.

This contract builds upon existing efforts by the Iowa Department of Natural Resources to determine sources of biological impairments in Iowa's streams. The contract covers a one year project to identify if pollutants in Dry Run Creek are causing conditions toxic to the aquatic life in the stream.

Funding requested in this proposal will allow for the following activities: 1) monthly macroinvertebrate density quantification at the 4 sites; 2) monthly periphyton sampling for chlorophyll *a* and biomass quantification at the 4 sites; 3) monthly toxicity screening of the cooling water effluent with *Daphnia magna*; 4) seasonal toxicity screenings of the cooling water effluent with *Isonychia bicolor* and stoneflies (probably *Acroneuria* sp.) taken from the Cedar River; 5) additional toxicity screenings with *D. magna* of other suspect effluents identified by the IDNR; 6) toxicity screenings with *D. magna*, *I. bicolor* and stoneflies of storm water runoff and stream water from each site during selected flood events; and 7) a 30 day colonization of benthic macroinvertebrate and periphyton communities in the Cedar River for transplantation to each site for a 7 day *in situ* test during either August or September, 2006. It must be noted that the above planned activities have the potential to be disrupted by natural (high water/ice) or anthropogenic (vandalism) events.

Funding for this agreement is available from State Infrastructure Funds (Environment First Funding). This contractor was chosen for their specialized expertise in collecting and analyzing biological toxicity data.

Mary Skopec Section Supervisor Water Monitoring and Assessment Iowa Geological Survey and Land Quality Bureau Environmental Services Division

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January 29, 2006

Contract Budget UNIVERSITY OF NORTHERN IOWA BUDGET Dry Run Creek Ecotoxicological Evaluation 5/1/06 to 4/30/07

:	5/1/06 to 4/30/07			
	DNR	COST	ST	
	FUNDS	SHARING	TOTAL	
I. SALARIES AND WAGES				
1. Principal Investigator: Kurt Pontasch				
\$66,506 base/9 months				
A. Summer 2006				
100% effort for 2 months	14,779	0	14,779	
B. Non-contract periods (Sum-Fall Interi	ims)			
100% effort for 4 weeks	7,390	0	7,390	
2. Graduate Research Assistant				
1200 hours @ \$12.50/hr	15,000	0	15,000	
3. Undergraduate Research Assistant				
300 hours @ \$9.00/hr	2,700	0	2,700	
SUBTOTAL	\$39,869	\$0	\$39,869	
II. FRINGE BENEFITS				
1. 22.20% of I.1.A.	3,821	0	3,821	
2. 12.20% of I.1.A.	902	0	902	
3. 0% of I.2 & I.3	0	0	0	
3. 0% 01 1.2 & 1.3		U	<u> </u>	
SUBTOTAL	\$4,723	\$0	\$4,723	
III. SUPPLIES				
1. Project Supplies	2,500	0	2,500	
SUBTOTAL	\$2,500	\$0	\$2,500	
IV. TRAVEL				
1. Project Travel	<u>1,000</u>	0	1,000	
SUBTOTAL	\$1,000	\$0	\$1,000	
TOTAL DIRECT COSTS (I. thru IV.)	\$48,092	\$0	\$48,092	
V. INDIRECT COSTS				
1. 8% of Total Direct Costs	3,847	0	3,847	
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SUBTOTAL	\$3,847	\$0	\$3,847	
TOTAL BUDGET (I. thru V.)	\$51,939	\$0	\$51,939	